Evidence of dispersed oil droplets using the LISST-100X particle counter
May 15, 2010

Samples were collected from one shallow water background station (far from the platform) and one deep water station (close to the platform) to monitor dispersed oil droplet size distribution.

Figure1 summarizes the measured small particles in the reference background station over a 40 sec sampling period. At all three depths evaluated, small particles are detectable at < 0.2 ul/l.

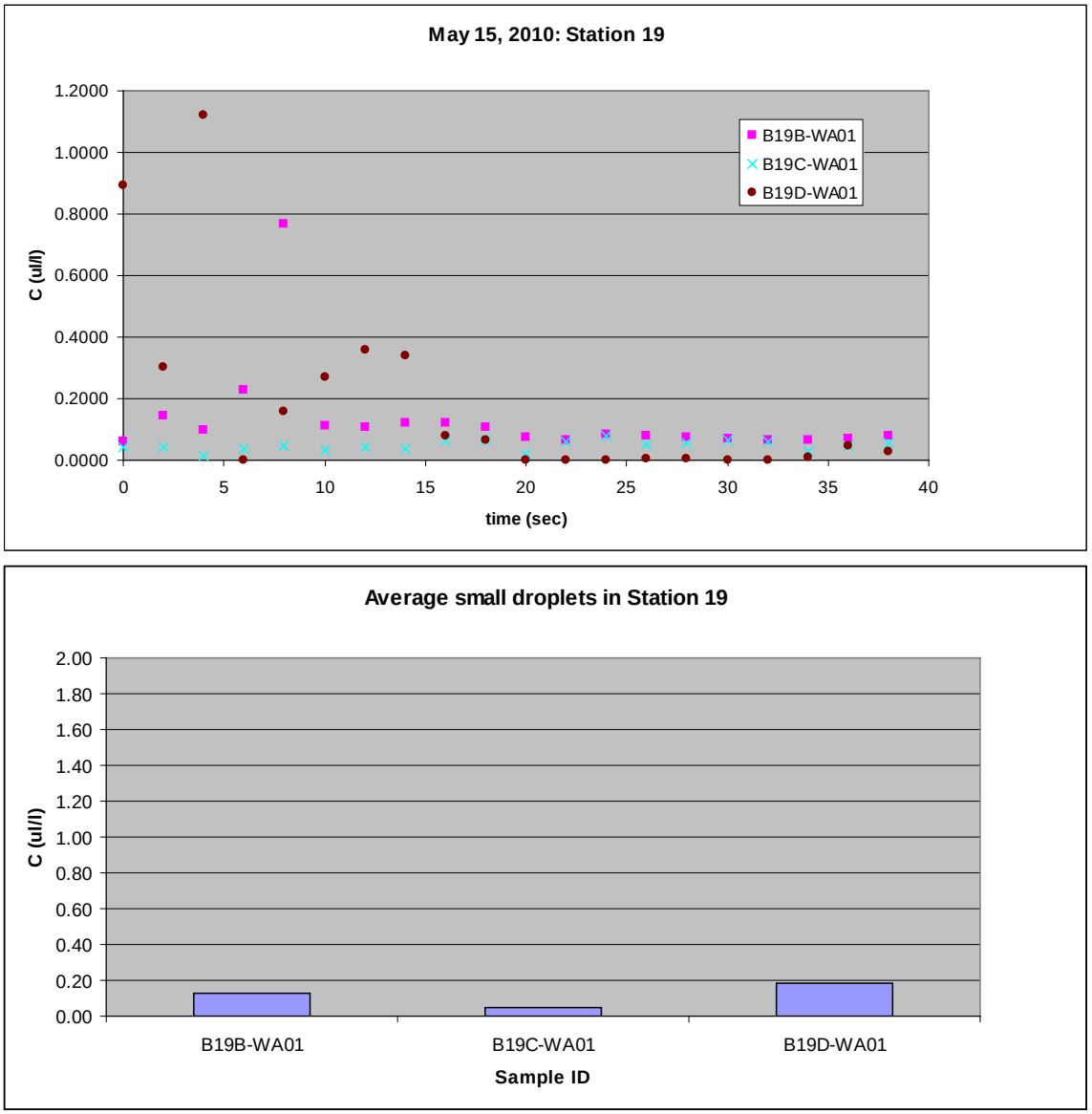

Figure 1: Time series measurement of dispersed small droplets (<60um) at for three different depths (upper) and average small particle concentrations (lower) at the background station 19.

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Figure 2 presents the small droplet particle size data for the near field station (#20). The data illustrates that at the surface (0.5m and 2m), there were significant amount of small particles that can be detected. In the next six depths, the small particles were not detectable. However, data from the further deeper sampling depths show very strong signal of the presence of small particles, with the peak concentration observed at 1400m, closely matching the results of the *in situ* UV fluorometer.

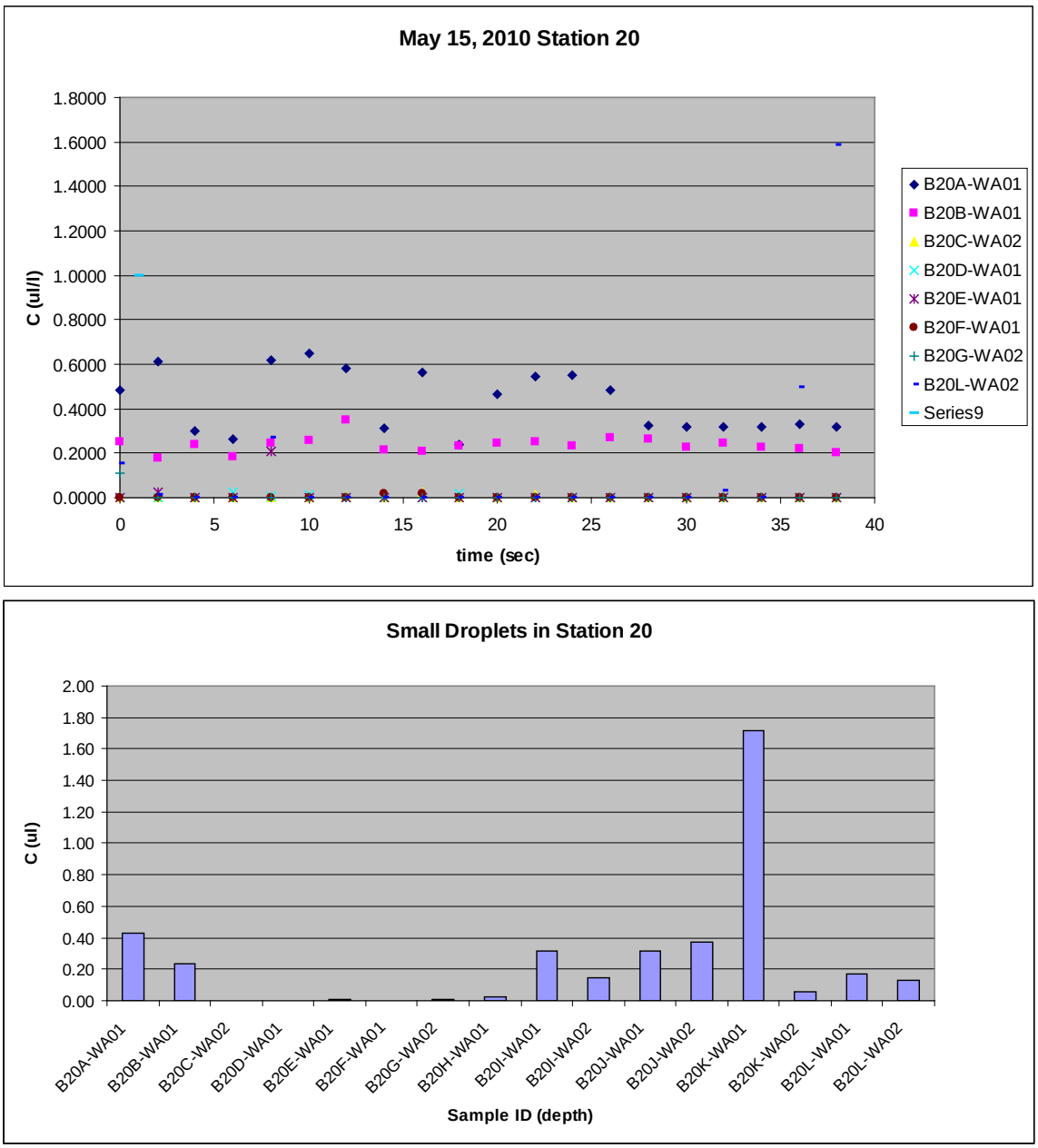

Figure2: Time series measurement of dispersed small droplets (<60um) at 12 different depths (upper) and average small particle concentrations (lower) at the near field station 2